

# TABLE OF CONTENTS

Volume 186

## ARTICLES

ALNASER, W. E. and M. J. ALOTHMAN / Studies of the Correlation between the Global Radiation, Ultraviolet Radiation, Cosmic Radiation, Sunspot Number and Meteorological Parameters	191
BESTMAN, A. R. / Two-Dimensional Fluctuating Flow and Heat Transfer to a Relativistic Radiating Gas	1
COLEY, A. and E. O'NEILL / Anisotropic and Inhomogeneous Solutions of the Einstein-Boltzmann Equations for Friedmann-Robertson-Walker Spacetimes	205
DELIN, XIANG, TANG YUAN and YU ZHIYAO / The Research of the Time Variation of H <sub>2</sub> O Maser	21
DEMIRCAN, O., S. SELAM and E. DERMAN / 1990 Photometry of a Small Amplitude W UMa System LS Delphini	57
DIONYSIOU, D. D., A. K. ZOIS and K. G. IAKOVIDIS / Artificial Satellites and the Three-Body Problem: A General Case	101
EATON, JOEL A. / Ultraviolet Light Curves of V535 Arae	7
ELSHABOURY, S. M. / The Restricted Problem of a Tri-Axial Rigid Body and Two Spherical Bodies with Variable Masses	245
GEROYANNIS, V. S. / An Iterative Technique for Computing Rotating Viscopolytropic Models	27
GRININ, V. P., N. N. KISELEV, N. KH. MINIKULOV, G. P. CHERNOVA, and N. V. VOSHCHINNIKOV / The Investigations of 'Zodiacal Light' of Isolated AE-Herbig Stars with Non-Periodic Algol-Type Minima	283
HIRTH, W., U. MEBOLD, M. DAHLEM, and P. MÜLLER / The Galactic Diffuse Component of Soft X-Rays and Its Source Function	211
HOYLE, F. / Mass Splitting in the Baryon Octet	299
HOYLE, F. / Particle Masses in the Baryon Decuplet	321
KEENAN, F. P. / The Ratio of Optical to Near-Infrared Emission Line Strengths in SiII as Electron Density Diagnostics for Planetary Nebulae	277
KOPAL, ZDENĚK / Radiative Energy Transfer in Extended Photospheres of the Components of Close Binary Systems	253
KRIM, M. S. ABDEL, M. T. ATTIA and M. A. MADKOUR / Application of the Superconvergence Properties of the Galerkin Approximation to Radiative Transfer	89
LOPATNIKOV, ALEXANDER, LEONID MAROCHNIK, LEV MUKHIN, ROALD SAGDEEV, DANIEL USIKOV, and GEORGY ZASLAVSKY / Evolution of the Oort Cloud Angular Momentum: Numerical Simulation	225

# TABLE OF CONTENTS

MAHMOUD, FAROUK M. / A Short Period Trial Detection of the Flare Star AD Leo	109
MAHMOUD, FAROUK M. / Photoelectric Observations of the Flare Star BD + 55°1823	113
MURDOCH, KAYLENE and J. B. HEARNshaw / High Precision Radial Velocities of Southern Solar-Type Stars by Cross-Correlation	169
MURDOCH, KAYLENE and J. B. HEARNshaw / The Precision of Radial-Velocity Determinations of Solar-Type Stars by Cross-Correlation	137
PARUL, R. K. and H.N.K. SARMA / The Maximum Limit of the Density Variation Parameter $\lambda$ for a Stable Neutron Star	81
SHARMA, K. C., URVASHI GUPTA, and R. C. SHARMA / Thermosolutal-Convective Instability of a Composite Plasma in a Stellar Atmosphere including the Effects of finite Larmor Radius and Hall Currents	179
SINGH, HARINDER PAL and M. K. DAS / Radial Oscillations of Finite Temperature White Dwarfs	117
SINGH, R. P. and H. C. KHARE / Stability of Two Superposed Homogeneous Fluids under Uniform Magnetic Field	125
WICKRAMASINGHE, N. C., B. JAZBI and F. HOYLE / The Extinction of Starlight Revisited	67

## LETTERS TO THE EDITOR

CHERNIN, A. D. / The Origin of the Angular Momentum Distribution in the Solar Nebula	159
HAMDY, M. A., M. S. ABO ELAZM and S. M. SAAD / Spectral Reclassification of Some Be Stars Using $\Delta Q$ Method	161
JAZBI, B., F. HOYLE and N. C. WICKRAMASINGHE / Extinction Properties of Infinitely Long Graphite Cylinders	151
ULRYCH, EMIL and PAVEL VORÁČEK / The Role of Expansion for the Entropy of the Universe	157
YADAV, R. B. S. and S. L. SAINI / Static Spherically-Symmetric Perfect Fluids with Pressure Equal to Energy Density	331

## BOOK REVIEWS

McNally, D. (ed.), <i>Reports on Astronomy</i> (JOHN DYSON)	165
Sanchez, F. and M. Vázquez (eds.), <i>New Windows on the Universe</i> (JOHN DYSON)	165
List of Forthcoming Papers	167, 337

